



HOW TO CAPITALIZE ON MARKET GROWTH IN NETWORK SECURITY

AVNET®

/ EXECUTIVE SUMMARY

As innovation accelerates and the exposure to sophisticated digital attacks grows, demand for network security solutions is exploding and driving investment into the sector. Analysts agree that there is a huge opportunity for growth in network security for companies ready to capitalize on it.

Optimizing your resources, financial solutions and getting to market faster can help you win.

In this white paper, find out how to maximize your opportunity as a Network Security Solutions Provider through partnering with Avnet Integrated Solutions and Dell.



/ NETWORK SECURITY MARKET DRIVERS

There are three main reasons that network security continues to be top of mind for the C-suite everywhere:



1. The pandemic accelerated various aspects of digital transformation in the rush to facilitate remote working. This led to mixed environments where compute demands were met by a combination of old and new systems, often patched together, creating security issues.
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2. Even though staffs are migrating back to offices and the field, the demand for ongoing, remote work and hybrid work situations remains high. This flexible working culture, driven by the influx of millennials in the workplace, has seen an increase in BYOD (bring your own device) practices, which in turn generates issues around network security.
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3. The rise of cloud computing and adoption of SaaS (Software-as-a-Service), along with the proliferation of compute at the network edge, has meant that SaaS applications are more often found in situations that are physically distant from the server.
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Snowballing devices on diverse and dispersed networks creates multiple weaknesses in the security chain. Organizations need to manage a much wider range of devices and with the increased adoption of BYOD, there are multiple ways of accessing main servers, with varying degrees of inbuilt security. Now, more data needs to be protected at the edge, and in transit, especially with the rise of cloud computing and SaaS.

/ INCREASING SECURITY BREACHES



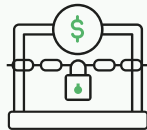
Kaspersky reported a security attack increase to **105 Billion** in the first half of 2019, up from **12 Billion** in the first half of 2018.*



Since the outbreak of COVID 19, attacks on VPNs (Virtual Private Networks) and remote access **have increased dramatically** with the Infrastructure Security Agency (CISA) and the US Department of Homeland Security (DHS) both **witnessing massive rises in the number of phishing and ransomware attacks.**



A survey conducted by Ermetic in March 2021 recorded that **80% of companies reported at least one cloud data breach**, with 43% of respondents reporting 10 or more breaches.*



At Intel Live in 2022, Intel asserted that **there will be a new ransomware attack every 2 seconds by 2031.**

/ GROWING OPPORTUNITY IN NETWORK SECURITY

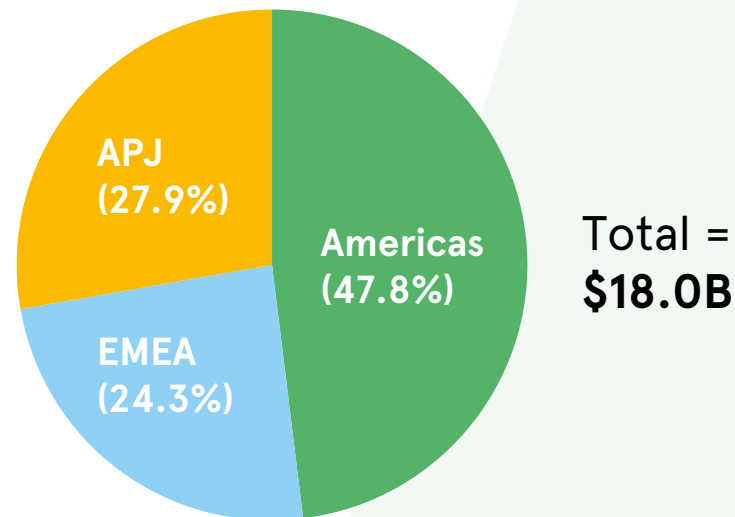
Many analysts are predicting huge growth in the demand for network and cyber security, with opportunity concentrated in North America. According to Fortune Business Insights, North America's network security market size is expected to reach around **\$19.1B** in 2029, from **\$9.07B** in 2022.

In their market forecast, IDC expects that the demand for network security technologies will drive market growth to **\$25.6B by 2025**.

"The information security industry is in a process of extreme change, with the network as a key control point," said Christopher Rodriguez, research director, Network Security Products and Strategies at IDC.*

According to IDC, the worldwide network security market grew by **7.9%** from **2019** to **2022**, with the Americas representing almost half of the global revenue, as can be seen below:

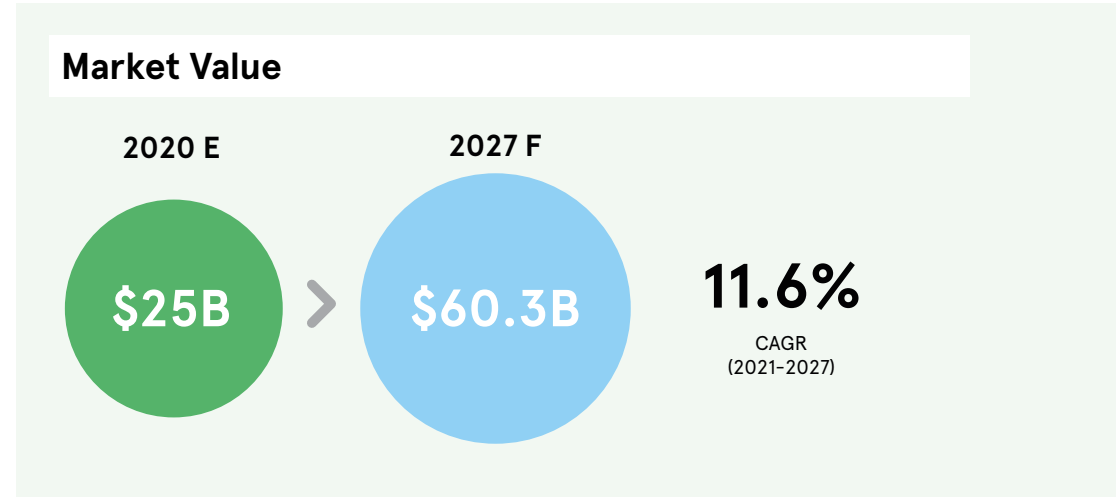
Worldwide Network Security Revenue Share by Region, 2020



Source: IDC, 2021

/ GROWING OPPORTUNITY IN NETWORK SECURITY (CONTINUED)

Qualiket research also predicts that the network security market will grow at a compound annual growth rate (CAGR) of **11.57%** between **2021** and **2027**. It projects that North America will dominate this growth owing to the record adoption of intelligent solutions with rich software—which open up the potential to be hacked—in industries such as healthcare, finance and retail. That growth will come predominately from larger enterprises, investing in cloud, software and edge computing.



Market at a Glance

- Global Network Security Market was valued at \$25B in 2020, estimated to reach \$60.3B in 2027, with a CAGR of 11.57% from 2021-2027.
- The scope of the Network Security market covers segmentation on the basis of organization size, deployment, end-user, type and by region.
- North America is projected to dominate the Network Security market due to the adoption of software and needs for data privacy in industries such as banking, financial services, insurance, healthcare and retail.
- Asia-Pacific is expected to expand at a significant growth rate over the forecast period of 2021 to 2027 owing to governments encouraging the public to adopt digitalization in their daily lives.
- In terms of segments, VPN's (Virtual Private Networks) are expected to dominate the Network Security Market throughout the forecast period, and is estimated to account for 20.07% of the market share in 2020.

/ DRIVING INNOVATION

Expanding network perimeters and the rise in the sheer number of connected devices through BYOD and the explosion of IoT (Internet of Things) devices are helping to drive the growth of network security. The ever-growing mountain of data generated by these devices along with the proliferation of high-speed connectivity continues to create complexity and increase the need for innovation at both the data center and the edge.

As organizations deploy multiple cloud solutions across their businesses that often don't readily integrate with each other, there is a need to manage not just cloud vs. on premise security, but inter-cloud network security as well. As new tools and technologies are adopted, the possible attack surface expands across multiple clouds. This requires multiple levels of firewalls with built-in protection as well as strong network monitoring and visibility, encapsulation and encryption.

The emergence of 4G and 5G, plus applications using AI (artificial intelligence) leads to multiple network gateways, too, along with the associated risks and threats that these bring.

With high performance compute now easily accessible to malicious individuals and organizations—whether private or state sponsored—the tools to compromise security are also more widely available. Companies need to stay vigilant.

These new technologies of cloud, multi-cloud, hybrid cloud and containers along with the proliferation of software solutions and expanding networks have led to gaps that can get in the way of security applications and protocols. IDC says that the specialized nature of cloud native technologies means buyers are considering less traditional form factors for security such as containerized, virtual and SaaS deployment which has helped businesses extend product ranges from their protection technologies to new cloud environments.



/ AS A NETWORK SECURITY SOLUTIONS PROVIDER, HOW DO YOU WIN?

Although the opportunities in the US market are clear, to compete you need to be able to deliver at a global level, with industry-leading hardware, software and supply chain. Efficiency is key and partnering with a single supplier that can meet your demands saves time, cost and complexity.

Align with industry-leading platforms: The performance of your solutions and the underlying security built into them is essential in helping you deliver products that meet the needs of your customers not just now, but in the future. Aligning with industry-leading platforms and components means future proofing is built in.

Solutions built for the Edge: The data explosion coupled with the almost ubiquitous bandwidth available and 5G mean that more solutions are being driven to the edge where transactions are occurring. This is driving demand for rugged, space and power maximizing products which offer both serviceable and secure solutions, often with specific requirements driven by environment, location and usage.

Perfect fit solutions - Globally: Being able to provide purpose-built products for your customers that put your software IP in the spotlight and getting them to market before the competition represent huge growth opportunities. Then, binding customers to you with ongoing servicing helps you provide a phenomenal customer experience wherever your customers need you in their operation and wherever they are across the globe.



/ HOW YOU WIN WITH AVNET INTEGRATED SOLUTIONS

Focus your energy on extending your competitive advantage and driving demand



Solution development



Systems integration



Financial transaction



Solution deployment and support

Development and Design – Working with your team, together, Avnet and Dell will use our deep knowledge and experience to support you in the product design stage of developing your solution. We'll build your proof of concept, and help you plan how to get to market quickly using the best platforms and solutions. Avnet will then manage first articles, the development of automated test platforms and assist in industry certifications if desired—all critical and time-consuming steps in the development cycle.

Systems Integration and Manufacturing – As an extension of your business, we manufacture your solution to your specifications. We can manage the entire supply chain from components to finished goods, offering a spectrum of solution available options from build to order to on hand inventory. Avnet delivers the components management and finished goods inventory you need.

Financial transactions – Setting up accounts, managing order entry, quoting, credit and contracts can all be facilitated by Integrated Solutions. This allows you to leverage our extensive financial expertise to engage directly with your customers or end users and use otherwise tied up capital to extend your advantage in the market.

Solution deployment and support – And of course, we can manage all the elements of transportation, distribution, deployment, installation and servicing globally. Even down to spares, solutions support and maintenance – we've got it handled.

/ MEET INTEGRATED SOLUTIONS

We help the world's most innovative brands bring their IP to market on world-class technologies

- Advanced system integration node to rack and in-region to global
- Global professional implementation and support services to deliver on your brand promise
- Innovative business solutions to maximize your financial results

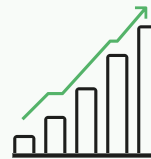
Your solution expertly designed, integrated, delivered, deployed and supported globally.

GROW REVENUE AND PROFITS WITH INTEGRATED SOLUTIONS



Optimize your capital

Leverage our resources, infrastructure and financial programs to invest your capital in what you do best.



Accelerate sales growth

Our customizable commerce solutions, global supply chain, integration and service capabilities speed growth.



Captivate your customers

Digital store front and commerce solutions streamline business while our global service network delivers on your brand promise.

Optimize your capital, accelerate sales growth, and captivate your customers with Integrated Solutions.

/ INTEGRATED SOLUTIONS AND DELL: A PARTNERSHIP

Avnet and Dell work together to bring you the best in engineering talent and even custom solutions designed for you from Dell.

With the proliferation of devices, network security infrastructure, BYOD and IoT, it's good to know that Dell EMC servers feature an enhanced Cyber Resilient Architecture that provides a hardened server design to protect, detect and recover from cyber attacks.

KEY SECURITY ASPECTS OF DELL SELECT PLATFORMS:

Effective Protection from attacks

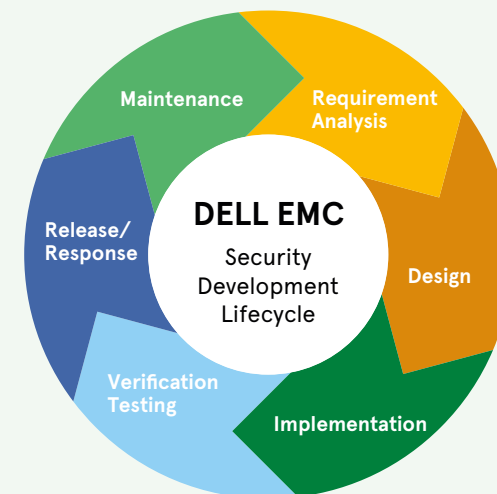
- Silicon-based Root of Trust
- Secure Boot
- Signed Firmware Updates
- Dynamic System Lockdown
- Hard drive encryption and enterprise key management

Reliable Detection of attacks

























- Configuration and firmware drift detection to persistent event logging
- Audit Logging and Alerts
- Chassis Intrusion Detection

Rapid Recovery with little to no business interruption

- Automated BIOS recovery
- Rapid operating system Recovery to Firmware Rollback
- Rapid System Erase



/DELL PORTFOLIO

Embedded		Attached			Integrated Solutions			
								
Diagnostic		Imaging			Connected Health	Precision Medicine	AI / Advanced Analytics	Hospital Information System
Medical Diagnostics Laboratory	PACS			Connected Health	Genomic Sequencing	Analytics, Visualization & Robotics	Electronic Health Records / Billing Systems / Stock	
Embedded hardware for diagnostic solutions and medical equipment.	Image Capturing	Image Viewing	Storage	Technologies used to deliver patient care outside of the hospital or doctor's office.	Complex sequencing of an entire genome requiring massive computations and storage of data.	Utilizing AI to aid in diagnostic process, i.e. scanning 1000 images to detect cancer. A check on radiologist efforts.	EHR / EMR systematized collection of patient and population electronically-stored health information in a digital format.	
	Clinic to Hospital	Small scale, clinic	Large scale, Hospital				FHR	
								
OptiPlex XE3			Dell EMC Unity XT		PowerEdge R740 Server with GPU		Support systems - Storage	
								
Embedded PC & Gateway			PowerScale		Dell EMC Unity XT		PowerScale	
								
			PowerStore		PowerScale	Precision 5820 Tower	VxRail	
								
							ECS Data Protection	
								
							IDPA DP4400	





Our team of Avnet and Dell specialists can help with all aspects of hardware, software, integration, product design, development and deployment and we can put all this experience to use on your network security project.

Let's talk!

Contact our team at integrated@avnet.com to find out more and discuss how we can help get a piece of the action.

Fortune Business Insights 2021

** ICD WW Network Security Forecast

*Gartner Inc, Top 10 Strategic Technology Trends for 2021: Empowered Edge, March 2021, p.2

**IDC Press Release, Edge Solutions Will Continue to Receive Strong Investment Support Over the Next Two Years, According to the IDC Edge View Survey, April 2022.